

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed May 10, 2005. Reconsideration and allowance of the application and presently pending claims 1-34, as amended, are respectfully requested.

1. Allowable Subject Matter

Applicants appreciate the Examiner's indication that claims 26-32 have been allowed. In that it is believed that every rejection has been overcome, it is respectfully submitted that each of the claims that remains in the case is presently in condition for allowance.

2. Claim Objections

Claims 23 and 25 were objected to because of informalities cited in the Office Action. The claims have been amended to overcome the objections, and Applicants respectfully request that the objections be withdrawn.

3. Response to Rejection of Claims 1-4, 6-8, 14-15, 17-21, and 23-25 Under 35 U.S.C. §102

Claims 1-4, 6-8, 14-15, 17-21, and 23-25 have been rejected under 35 U.S.C. § 102(b) as being anticipated by *Buskirk* (U.S. Patent No. 4,872,027). Applicants respectfully traverse this rejection.

It is axiomatic that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983). Therefore, every claimed feature of the claimed subject matter must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102(b). In the present case, not every feature of the claimed subject matter is represented in the *Buskirk* reference. Applicants discuss the *Buskirk* reference and Applicants' claims in the following.

a. Claim 1

As provided in independent claim 1, Applicants claim:

A print cartridge comprising:
a cartridge body having a lower portion and a vertical wall;
a printhead coupled with the lower portion; and
a contact array comprising a plurality of contact areas disposed on the vertical wall, *the contact array being one of at least two contact arrays, each having a different pattern of contact area locations, a portion of the contact areas of each contact array capable of providing identity information for the print cartridge and another portion of the contact areas of each contact array capable of providing an indication of whether the cartridge is installed in a printer.*

(Emphasis added).

Applicants respectfully submit that independent claim 1 is allowable for at least the reason that *Buskirk* does not disclose, teach, or suggest at least the feature of "the contact array being one of at least two contact arrays, each having a different pattern of contact area locations, a portion of the contact areas of each contact array capable of providing identity information for the print cartridge and another portion of the contact areas of each contact array capable of providing an indication of whether the cartridge is installed in a printer," as recited and emphasized above in claim 1.

In particular, *Buskirk* fails to disclose both a "portion of the contact areas of each contact array capable of providing an indication of whether the cartridge is installed" and a "portion of the contact areas of each contact array capable of providing identity information for the print cartridge," as featured in claim 1. Thus, *Buskirk* does not teach or suggest at least all of the claimed features of claim 1. Therefore, claim 1 is not anticipated by *Buskirk*, and the rejection should be withdrawn for at least this reason alone.

b. Claims 2-4 and 6-8

Because independent claim 1 is allowable over the cited art of record, dependent claims 2-4 and 6-8 (which depend from independent claim 1) are allowable as a matter of law for at least the reason that the dependent claims 2-4 and 6-8 contain all the elements and features of independent claim 1. For at least this reason, the rejections of claims 2-4 and 6-8 should be withdrawn.

Additionally and notwithstanding the foregoing allowability of claims 2-4 and 6-8, these claims recite further features and/or combinations of features (as is apparent by examination of the claim itself) that are patentably distinct from the cited art of record. Hence, there are other reasons why these dependent claims are allowable.

c. Claim 14

As provided in independent claim 14, Applicants claim:

A print cartridge comprising:
a housing mechanically interoperable with printing systems of a plurality of printing system families;
means for ejecting fluid disposed on the housing; and
means for electrically coupling to a printing system, the means for electrically coupling including means for permitting detection of installation of the print cartridge and means for permitting operation of the means for ejecting fluid.

(Emphasis added).

Applicants respectfully submit that independent claim 14 is allowable for at least the reason that *Buskirk* does not disclose, teach, or suggest at least "means for electrically coupling to a printing system, the means for electrically coupling including means for permitting detection of installation of the print cartridge and means for permitting operation of the means for ejecting fluid," as recited and emphasized above in claim 14.

In particular, *Buskirk* fails to disclose "means for permitting detection of installation of the print cartridge," as featured in claim 14. Rather, *Buskirk* discloses at most identification contact pads and does not disclose the aforementioned feature. See col. 6, lines 60-61. Thus, *Buskirk* does not teach or suggest at least all of the claimed features of claim 14. Therefore, claim 14 is not anticipated by *Buskirk*, and the rejection should be withdrawn for at least this reason alone.

d. Claims 15-16

Because independent claim 14 is allowable over the cited art of record, dependent claims 15-16 (which depend from independent claim 14) are allowable as a matter of law for at least the reason that the dependent claims 15-16 contain all the elements and features of independent claim 14. For at least this reason, the rejections of claims 15-16 should be withdrawn.

Additionally and notwithstanding the foregoing allowability of claims 15-16, these claims recite further features and/or combinations of features (as is apparent by examination of the claim itself) that are patentably distinct from the cited art of record. Hence, there are other reasons why these dependent claims are allowable.

e. Claim 17

As provided in independent claim 17, Applicants claim:

A fluid ejection device comprising:
a body having a lower portion and a vertical wall,
a plurality of nozzles coupled with the lower portion, and
plurality of contact areas disposed on the vertical wall, *the plurality of contact areas including a first group having a fixed layout of contact area locations, and a second group having a layout of contact area locations which is one a plurality of layouts of contact area locations, each layout being different than the other, wherein the second group is coupled to provide identification information for the fluid ejection device.*

(Emphasis added).

Applicants respectfully submit that independent claim 17 is allowable for at least the reason that *Buskirk* does not disclose, teach, or suggest at least the feature of "the plurality of contact areas including a first group having a fixed layout of contact area locations, and a second group having a layout of contact area locations which is one a plurality of layouts of contact area locations, each layout being different than the other, wherein the second group is coupled to provide identification information for the fluid ejection device," as recited and emphasized above in claim 17.

In particular, *Buskirk* fails to disclose a "a second group having a layout of contact area locations which is one a plurality of layouts of contact area locations, each layout being different than the other, wherein the second group is coupled to provide identification information for the fluid ejection device" in addition to a first group having a fixed layout of contact area locations," as featured in claim 17. Thus, *Buskirk* does not teach or suggest at least all of the claimed features of claim 17. Therefore, claim 17 is not anticipated by *Buskirk*, and the rejection should be withdrawn for at least this reason alone.

g. Claims 18-21 and 23-25

Because independent claim 17 is allowable over the cited art of record, dependent claims 18-21 and 23-25 (which depend from independent claim 17) are allowable as a matter of law for at least the reason that the dependent claims 18-21 and 23-25 contain all the elements and features of independent claim 17. For at least this reason, the rejections of claims 18-21 and 23-25 should be withdrawn.

Additionally and notwithstanding the foregoing allowability of claims 18-21 and 23-25, these claims recite further features and/or combinations of features (as is apparent by examination of the claim itself) that are patentably distinct from the cited art of record. Hence, there are other reasons why these dependent claims are allowable.

4. Response to Rejection of Claim 9 Under 35 U.S.C. §102

Claim 9 has been rejected under 35 U.S.C. § 102(b) as being anticipated by *Kline* (U.S. Patent No. 6,435,662). Applicants respectfully traverse this rejection.

As provided in independent claim 9, Applicants claim:

A method of making a fluid ejecting device, comprising:
electrically connecting one of a plurality of differently patterned contact array circuits to a printhead, ***the plurality of differently patterned contact array circuits each having a plurality of uniquely positioned contact areas and a plurality of commonly positioned contact areas***; and
attaching the contact array circuit and printhead to a housing.

(Emphasis added).

Applicants respectfully submit that independent claim 9 is allowable for at least the reason that *Kline* does not disclose, teach, or suggest at least the feature of "the plurality of differently patterned contact array circuits each having a plurality of uniquely positioned contact areas and a plurality of commonly positioned contact areas," as recited and emphasized above in claim 1.

In particular, *Kline* fails to disclose whether or not a plurality of contacts are uniquely positioned or commonly positioned, as featured in claim 9. Thus, *Kline* does not teach or suggest at least all of the claimed features of claim 9. Therefore, claim 9 is not anticipated by *Kline*, and the rejection should be withdrawn for at least this reason alone.

5. Response to Rejection of Claims 11-12 Under 35 U.S.C. §102

Claims 11-12 have been rejected under 35 U.S.C. § 102(b) as being anticipated by *Barbehenn* (U.S. Patent No. 5,363,134). Applicants respectfully traverse this rejection.

As provided in independent claim 11, Applicants claim:

A fluid ejection device comprising:
a fluid ejecting integrated circuit;
a contact array operably connected to the fluid ejecting integrated circuit, ***the contact array having a plurality of uniquely positioned contact areas and a plurality of commonly positioned contact areas, wherein the commonly positioned contact areas are arranged to make electrical contact with a fluid ejection system of more than one fluid ejection system family and communicate with circuitry providing an indication of installation of the fluid ejecting integrated circuit, and wherein the uniquely positioned contact areas are arranged to make electrical contact with a fluid ejection system of one fluid ejection system family and communicate with circuitry providing identification information of the fluid ejecting integrated circuit.***

(Emphasis added).

Applicants respectfully submit that independent claim 11 is allowable for at least the reason that *Barbehenn* does not disclose, teach, or suggest "the contact array having a plurality of uniquely positioned contact areas and a plurality of commonly positioned contact areas, wherein the commonly positioned contact areas are arranged to make electrical contact with a fluid ejection system of more than one fluid ejection system family and communicate with circuitry providing an indication of installation of the fluid ejecting integrated circuit, and wherein the uniquely positioned contact areas are arranged to make electrical contact with a fluid ejection system of one fluid ejection system family and communicate with circuitry providing identification information of the fluid ejecting integrated circuit," as recited and emphasized above in claim 1.

In particular, *Buskirk* fails to disclose whether or not a plurality of contacts are uniquely positioned or commonly positioned, as featured in claim 11. Thus, *Barbehenn* does not teach or suggest at least all of the claimed features of claim 11. Therefore, claim 11 is not anticipated by *Barbehenn*, and the rejection should be withdrawn for at least this reason alone. Accordingly, claim 12 (which depends from

claim 11) is allowable for at least the reason that claim 12 includes all of the features of claim 11.

6. Response to Rejections of Claims 5, 10, 13, and 22 Under 35 U.S.C. §103

In the Office Action, claims 5 and 22 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Buskirk* in view of *Childers* (U.S. Patent No. 5,411,343); claim 10 stands rejected as allegedly being unpatentable over *Kline* in view of *Childers*; and claim 13 stands rejected as allegedly being unpatentable over *Barbehenn*.

It is well-established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited combination of references must disclose, teach, or suggest, either implicitly or explicitly, all elements/features/steps of the claim at issue. See, e.g., *In Re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988), and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).

Applicants submit that independent claims 1, 9, 11, and 17 contain features that are not disclosed in the respected cited art of *Buskirk*, *Kline*, and *Barbehenn*, as previously discussed. Further, *Childers* is legally inadequate to cure the deficiencies of the aforementioned references. Accordingly, claims 5, 10, 13, and 22 (which depend from respective independent claims 1, 9, 11, and 17) are allowable over the cited art for at least this reason.

7. Newly Added Claims


Claims 33 and 34 have been newly added to further define and/or clarify different embodiments. Claims 33 and 34 are believed to be allowable for at least the reason that respective claims 1 and 23 (from which claims 33 and 34 depend) are allowable over the cited art. As an additional reason, the cited art fails to teach or suggest "wherein the portion of the contact areas of each contact array are capable of providing identity information is located in different locations in each contact array of the at least two contact arrays," as recited in claim 33 and "wherein another portion of contact areas of each contact array is capable of permitting detection of installation of the print cartridge and the another portion of contact area permitting detection of

installation is located in different locations in each contact array," as recited in claim 34. Therefore, claims 33 and 34 should be allowable over the cited art.

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1-34 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,


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